



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/579,866	05/25/2000	Neal R Eisenberg	STL9-2000-0058	9640

24852 7590 02/11/2003

INTERNATIONAL BUSINESS MACHINES CORP
IP LAW
555 BAILEY AVENUE , J46/G4
SAN JOSE, CA 95141

EXAMINER

PANNALA, SATHYANARAYA R

ART UNIT PAPER NUMBER

2177

DATE MAILED: 02/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/579,866

Applicant(s)

EISENBERG ET AL.

Examiner

Sathyanarayan Pannala

Art Unit

2177

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6 Decembe 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 2, 8, 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 5/25/00 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 2, 8, 14 are cancelled on the basis of applicant's Amendment 12/06/2002.

Drawings

2. The drawing, Fig. 1 is objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character 30 has been used to designate all computers. Two labels in Fig. 1 are same as "Local Area Network", instead of "Local Area Network1, Local Area Network2."
3. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections - 37 CFR § 1.75

4. Claims 3-6, 9-12, 15-18 are objected under 37 CFR 1.75(c) as claims presented in dependent form even after deleting the parent claim. A proposed claims correction or corrected claims are required in reply to this Office Action to avoid abandonment of the application.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

"A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made."

2. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xu et al. (US Patent 6,324,581) as applied to claims above, and further in view of Schmuck et al. (US Patent 5,940,841).

3. As per independent claims 1, 7, 13, Xu rendered by the following:

"generating a request from a client on the local data processing system to the remote data processing system to open a foreign file in the foreign file system" at Fig. 2, col. 8, lines 47-49;

"opening of the of the foreign file by the foreign file system" at Fig. 3, col. 10, lines 14-16;

"sending of the file attributes (interpreted attributes as part of metadata) of the foreign file, hereinafter foreign file attributes, to the local data processing system" at Fig. 3, col. 8, lines 57-59 and col. 10, lines 16-17;

"storing of the foreign file attributes (interpreted attributes as part of metadata) by the local data processing system" (it stores with the data mover and allows for access by the client) at Fig. 3, col. 10, lines 17-19;

"accessing of the foreign file attributes stored in the local data processing system by the local data processing system client to process the foreign file" at Fig. 3, col. 10, lines 12-14;

"processing by the local data processing system client the foreign file using the stored foreign file attributes" at Fig. 3, col. 10, lines 14-19.

"determining a subset of the foreign file attributes which are equivalent to a corresponding subset of file attributes of the native file system, the subset of the foreign file attributes hereinafter known as conventional file attributes" at Fig. 2, col. 8, lines 47-59;

"returning the conventional file attributes to the client" at Fig. 3, col. 8, line 65 to col. 9, line 6;

Xu does not teach extended file attributes. However, Schmuck teaches "storing a remaining subset of the foreign file attributes which are not equivalent to a corresponding subset of file attributes of the native file system, the remaining subset of the foreign file attributes hereinafter known as extended file attributes" (at Fig. 2, col. 8, lines 47-59). Thus, it would have been obvious to one ordinarily skilled in the art at the time of the invention to extract extended file attributes from metadata in order to better access shared disk system.

4. As per dependent claims 3, 9, 15, Xu rendered by the following:

"accessing of the foreign file by the client via a protocol of the native file system, the accessing being performed in a similar manner to accessing a native file system file" at Fig. 1, 4-5, col. 14, lines 9-22;

Xu does not teach using extended file attributes for accessing foreign file.

However, Schmuck teaches "accessing of the foreign file by the client by use of the extended file attributes, the accessing being performed via a protocol different from the native tile system protocol" (at col. 27, lines 10-30). Thus, it would have been obvious to one ordinarily skilled in the art at the time of the invention to extract extended file attributes from metadata in order to better access shared disk system.

5. As per dependent claim 4, 10, 16, Schmuck teaches the following:

"starting an expiration timer corresponding to the extended file attributes" at col. 29, line 36 to col. 30, line 37;

"removing the extended file attributes from the local data processing system storage after the expiration of tile expiration timer" at col. 30, lines 4-21.

6. As per dependent claims 5, 11, 17, Xu teaches "the sending of the foreign file attributes is performed by a web server located on the remote system, the web server being capable of sending and receiving messages via a network" at Fig. 1, 4-5, col. 13, lines 36-63.

7. As per dependent claims 6, 12, 18, Schmuck teaches the following:

"storing the extended file attributes in a shared memory portion of the local data

processing system storage which is accessible by the client and other local data processing system processes” at Fig. 2, col. 8, lines 47-59;

“associating a unique handle (interpreted unique handle as inode) with the extended file attributes” at col. 1, lines 30-34;

“providing the unique handle (interpreted unique handle as inode) to a local data processing system process to enable the local data processing system process to access the extended file attributes at col. 27, lines 31-62.

Response to Arguments

8. Applicant's arguments filed 12/06/2002 have been fully considered but they are not persuasive as described below:

First, the applicant stated as “Applicants have amended independent claims 1, 7 and 13 to incorporate the limitations of dependent claims 2, 8 and 14 respectively. These limitations are described or suggested by Xu et al., and the Examiner did not assert that Xu et al. described or suggested all of these limitations.” As an example, Xu teaches the claim 1, element “generating a request from a client on the local data processing system...” (see Xu at Fig. 2, col. 8, lines 47-49).

Second, the applicant stated as “However, Xu et al. fails to teach or suggest ‘determining a subset of the foreign file attributes...’ Xu teaches at Fig. 2, col. 8, lines 47-59. Xu et al. teaching consists of determining if a foreign file (requested

file) is existing in the local directory using the attributes of the file on the basis of requested file and sends same attributes to the data mover that owns the file system.

Third, the applicant stated as "The combination of Xu et al. and Schmuck et al. also fails to teach or suggest this second claim element, and the examiner does not assert that combination of Xu et al. and Schmuck et al. teaches or suggests this second claim element." Xu teaches the second claim element at Fig. 2, col. 8, line 54 to col. 9, line 6. As explained in the Xu et al. example is that if the file is not on its own file system (43) of the data mover 41, then the data mover 41 sends the metadata to data mover 42 to access the file. The data mover 42 sends to data mover 41, the metadata with the file pointer for the file location, after locking (as requested by 41) the file, so that the data mover 41 using the metadata can directly access the file and perform read or write operation.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 2177

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


10. The prior art made of record, listed on form PTO-892, and not relied upon, if any, is considered pertinent to applicant's disclosure.

11. If a reference indicated, as being mailed on PTO-FORM 892 has not been enclosed in this action, please contact Lisa Craney whose telephone number is (703) 305-9601 for faster service.

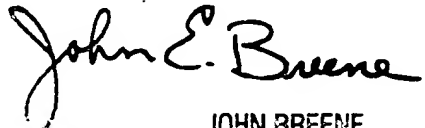
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sathyanarayan Pannala whose telephone number is (703) 305-3390. The examiner can normally be reached on 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (703) 305-9790. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.


Sathyanarayan Pannala
Examiner
Art Unit 2177

srp
February 10, 2003


JOHN BREENE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100